

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2017/2018 SESSION

TIS2151 – WEB APPLICATION DEVELOPMENT
TIC2211 – INTERNET COMPUTING

(All sections / Groups)

12 October 2017
2.30 p.m. – 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 7 pages with 4 Questions only.
2. Answer all **FOUR** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please print all your answers in the answer booklet for each questions answered.

Question 1

- a) Fill in the blanks in each of the following statements regarding Internet and WWW:

[2 marks]

- i. When the user clicks a hyperlink, a _____ locates the requested webpage and sends it to user's web browser.
- ii. HTML5 is a _____ language designed to specify the content and structure of webpages.
- iii. Web-based applications are multitier applications. The _____ tier maintains the application's data and typically stores data in a relational database management system.
- iv. The _____ standard specifies data formats, which programs can use to interpret data correctly.

- b) One of the new features of HTML5 is the introduction of new *input types* for HTML form. Give one advantage of the new *input types* over the existing *input types*. List 4 of the new HTML5 *input types*.

[3 marks]

- c) Write an HTML5 code to create the following form.

- It has a field for the user to enter a favorite number which has to be between 1 and 10 with 7 as the default value.
- The form must include an optional question that reveals the Favorite Fruit selection when the user click on the text "Optional question:".
- The Favorite Fruit field must have the *autocomplete* feature that includes "Apple", "Banana", and "Cherry" as the available options.

Favorite Number: (Enter a number between 1 and 10)

▼ Optional question:

Favorite Fruit:

Select a fruit ▼
Apple
Banana
Cherry

[5 marks]

Question 2

a) Fill in the blanks in each of the following statements related to CSS in HTML5.

- i. If the user defines font-size in a user style sheet, the author style has _____ precedence over the user style.
- ii. The _____ attribute defines the number of pixels that the box shadow will appear to the left or right of the box.
- iii. Styles may be defined by a user, an author or a user agent. An example of a user agent is _____.
- iv. In order to enable the self-validation feature for input type *tel*, the _____ attribute must be specified in the `<input>` element.

[2 marks]

b) CSS3 allows programmer to specify the presentation of elements on a web page by using either inline CSS, embedded CSS or external CSS. Explain how external CSS could be applied to HTML documents and explain the advantage of using external CSS.

[2 marks]

c) Write the CSS rules to achieve the following:

- i. Display all hyperlinks in red without underlining them.
- ii. Set the font size of `` elements that are nested in an `` element to only 20% of the size of the base font of the system.
- iii. Create a style class called "BlueBold" that sets the font color of `` elements to blue and also make it bold.

[3 marks]

d) Complete the embedded CSS code in the HTML5 code below to display the text as shown here.

The text at the end of this sentence ^{is in superscript}

The text at the end of this sentence _{is in subscript}

The text at the end of this sentence is shifted right

```
<html>
  <head>
    <meta charset = "utf-8">
    <title>Relative Positioning</title>
    <style type = "text/css">
      .....
      .....
      .....
    </style>
  </head>
  <body>
    <p>The text at the end of this sentence
      <span class = "super">is in superscript</span>.</p>

    <p>The text at the end of this sentence
      <span class = "sub">is in subscript</span>.</p>

    <p>The text at the end of this sentence
      <span class = "shiftright">is shifted right</span>.</p>
  </body>
</html>
```

[3 marks]

Question 3

a) Fill in the blanks in each of the following statements related to JavaScript in HTML5.

- i. Every array in JavaScript knows its own length using _____ attribute.
- ii. The window object's _____ method displays a dialog into which the user can type a value.
- iii. When using the method Math.random, the _____ factor determines the size of the random value range while the _____ number is added to the result to determine where the range begins.

[2 marks]

b) Using HTML and Javascript, create the following form to get 2 inputs from the user, i.e. current meter reading *curr*, and previous reading *prev*. Once the "Calculate Bill" button is clicked, a function called *input()* will be called.

[2 marks]

The function *input()*:

- gets the current and previous reading from the form, *curr* and *prev*
- alert the user to reenter the values if current reading is smaller than previous reading, otherwise call the function *calculate()* and send current and previous reading

[3.5 marks]

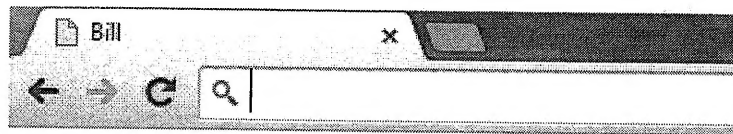
The function *calculate()*:

- Calculates the unit used (current-previous)
- Identify the price per unit based on the following table using if..else statement

Units used	Price per unit
0-500	\$0.02
>500	\$0.04

- Calculate the total bill and display it using an alert box.

[2.5 marks]



Electric Meter Reading

Current Reading:

Previous Reading:

Question 4

- a) What are the details excluded during wireframe design of a webpage?

[1 marks]

- b) List down the two types of wireframe and explain each of them.

[2 marks]

- c) Write a PHP function called *multiply* that takes in 2 values and return the product of the 2 values. Call that function to display the product of 1 and 16.

[2 marks]

- d) Assume that you have created a database “FCI” with username “admin” and password “123”. Write PHP scripts to do the following:

- i. Connect to the MySQL database server and select “FCI” database.

[1 mark]

- ii. Create a table named “students” with 3 fields for First Name, Last Name and age.

[1 mark]

- iii. Insert the following data into the table “students”: First Name: Aniq, Last Name: Imran, Age: 18.

[2 marks]

- iv. Update the Age field for the data in part (iii) above from 18 to 20.

[1 mark]

